

Vienna Instruments
Solo Download Instruments
English Horn I
Full Library

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Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Solo Download Instruments! This document contains the mapping information for the "Full" version of the Vienna Instruments English Horn I. You will find in it a comprehensive survey of the articulations/Patches content, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset.

"Full" Library

As opposed to the "Standard" versions of our Solo Download Instruments, the "Full" versions are identical with the corresponding instruments of a DVD Collection, i.e., they contain exactly the same samples, Patches, Matrices and Presets as the latter without any restrictions.

Installing a Download Instrument's Full version copies that instrument's sample content to a separate folder on your hard disk, so that it is not necessary to keep its Standard version installed – you may either delete it from your hard disk or at least remove it from the Directory Manager's list of activated instruments. In the Vienna Instruments Browser, the path of the Full version will be the same as that of the corresponding DVD Instrument, so that you can still see both versions as separate entries if you keep the Standard version installed.

Data paths and Patch name conventions

Since the Full versions of Download Instruments conform to the corresponding DVD Instruments, the data paths in your Vienna Instruments browser will be different than those of Standard Download or Special Edition Instruments. For instance, the path of the Standard Download Library of Flute 1 is "02D Flute-1", and all Patches can be found in this folder regardless of the articulation group they belong to. The Patch number is also marked with a "D" so that you immediately know it is a Download Instrument. In the Vienna Special Edition, Flute 1 is located in the folder "11 Flutes" together with the other flutes. Here, the Patch number is marked with an "S". The Full Download of Flute 1 is located in the subfolder "32 Flute" of the section "Woodwind Patches", which again contains subfolders grouping the Patches according to type, e.g., "01 SHORT + LONG NOTES", "02 DYNAMICS", etc. Patch names of the Full Download Library may differ from the corresponding ones of the Standard Download Library.

While Full Download Instruments contain all articulations of the corresponding DVD Instruments, their Patches are not divided into Standard and Extended content. The list of articulations further down which gives a summary of the Library's contents.

Special Patch configurations which sometimes are part of a Standard Download Instrument may be found in a reserved folder called "98 RESOURCES" in the Full Instrument. E.g., Flute 1 Standard contains the Patch "22D FL1 legato-sus"; in Flute 1 Full, this Patch is called "01 FL1_perf_leg_sustain" and is located in the Resources' subfolder "03 Perf Speed variation". (Apart from that, it also contains more samples.) Other articulations that can be found in the Resources folder are isolated dynamics repetitions in the subfolder "01 Perf Rep dyn" – e.g., the five repetitions of a legato crescendo, divided into separate Patches – and extracted velocity layers of sustained notes in the subfolder "02 Long Notes – Single Layer".

Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary.

Where the type of articulation requires a special mapping (e.g., natural harmonics patches), the mapping layout will be shown in a detailed graphic.

Major and minor runs are always mapped to the keys of their scale, as are **arpeggios** to the keys of the broken chord played. **Grace notes** and **mordents** are mapped to their target note, i.e., the note the articulation ends with. Due to their nature, all **upward and downward articulations** (e.g., fixed glissandos and octave runs) have different mapping ranges – the upward movements ending the involved interval below the Patch's upper mapping range, while downward movements end the interval above its lower mapping range. (Please note that not all of the articulations mentioned above may be contained in your Collection.)

The Patch information also lists a Patch's velocity layers in detail. Velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements:

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
2	1–88	89–127				
3	1–55	56–88	89–127			
4	1–55	56–88	89–108	109–127		
5	1–24	25–55	56–88	89–108	109–127	
6	1–24	25–55	56–88	89–108	109–118	119–127

Interval performances

Interval performances are one of the outstanding features of our Vienna Instruments. They allow you to play authentic legato without any programming tricks. In our Silent Stage, all intervals from minor second to the octave were recorded for every instrument – up and down, of course; that makes 24 interval samples per note for one velocity alone! When you load an interval performance Patch and play a line on your keyboard, the software automatically joins the right samples with their interval transitions again, and you hear a perfect legato. By the way, this technique is not only used for legato but also for other articulations like the strings' portamento, marcato, or détaché and spiccato articulations.

Interval performances also contain at least two legato repetitions for every note which alternate automatically whenever you strike a key more than once. There also are preconfigured thresholds for legato and repetition notes: The legato threshold – i.e., the maximum break between notes where legato is played – is 50 ms. Otherwise, a sustained starting note will sound so that you can easily start a new phrase without leaving the legato Patch. For note repetitions, the threshold is 200 ms: a break up to that duration will yield a legato repetition; if the break is longer, a new starting note. But of course, it's mingling legato with other articulations which makes a piece really come alive.

Due to their nature, all interval performances are monophonic; otherwise, the software would have to be able to decide which source note belongs to which target note. To circumvent this, you can open two VI instances of the same instrument on separate MIDI tracks without any additional strain on your RAM.

Note: the Vienna Instruments PRO player software also allows you to play polyphonic Interval performances.

Another variety of interval performance you will come across is the “perf-leg_sus” Patch. These Patches also contain normal legatos, only the target note of each interval is crossfaded into a looped sustain. They can be used for slower pieces with long notes; however, you should use them with circumspection, since plain legatos sound more lively because they not only render the interval transitions as they were played, but also have different target samples for every interval instead of the same sustained note: When you play, e.g., c–e and then c#–e with normal legato, you will get two different “e” tones; with sus-legato you won't.

Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

A/B switching normally is set to A0 for upward/crescendo, and B0 for downward/diminuendo. However, some bass instruments go below that range so that the A/B keys have to be adapted accordingly. For example, the A/B switches for double bass are A0 and A#0 because the instrument's lower range extends to B0.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

Speed controller switches naturally are adjusted to the Patches involved, and have been tested carefully as to their playability. However, if you find that they do not fit your playing, or want to try out other settings, you can change this as well as any other controller's settings at the **Control edit** page, and save the result in your Custom Matrix folder.

Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here. Please note that the Matrices of a Preset can also be switched with MIDI Program Changes (VI: 101–112; VI PRO: 1–127) instead of keyboard notes, and if you like to keep your keyboard free for playing instead of switching, you can disable Preset keyswitching and only use MIDI Program Changes. Vienna Instruments PRO also allows you to define a MIDI Control for Preset keyswitching.

Abbreviations

Here's a list of abbreviations in Patch names, which will help you to determine a Patch's content even without the help of the Vienna Instruments browser. Please note that not all of the abbreviations may occur in the manual on hand.

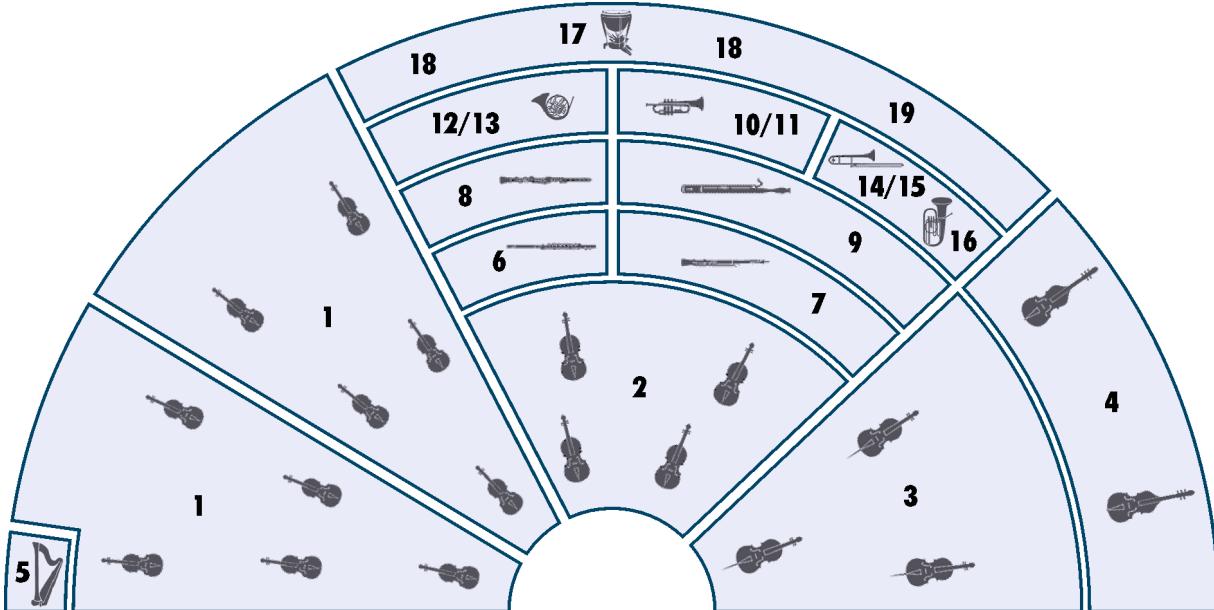
Abbreviation	Meaning	Abbreviation	Meaning
+	faster articulation (runs and arpeggios)	li	light
150, 160, ...	150, 160, ... BPM (beats per minute)	lo	long
1s, 2s, ...	tone length 1 sec., 2 sec., ...	ma	major
acc	accelerando	me	medium
all	combination of all Patches of a category	mi	minor
arp	arpeggio	mord	mordent
cre	crescendo	nA	normal attack
dim	diminuendo	noVib	without vibrato
dm	diminished (arpeggios)	perf-rep	repetition performance
dyn	dynamics (crescendo and diminuendo)	por	portato
dyn5, dyn9	dynamics, 5/9 repetitions	run	octave run
fa	fast	sA	soft attack
faT	fast triplets	sl	slow
fA	fast attack	sta, stac	staccato
fA_auto	attack automation (normal/fast attack)	str	strong
fast-rep	fast repetitions	sus	sustained
flatter	flutter tonguing	T	triplets
fx	effect – flute: tongue-ram staccato	UB	upbeat
hA	hard attack	UB-a1, -a2	1, 2 upbeats
leg	legato	v1, v2 ...	1st, 2nd, ... variation
		Vib	with (medium) vibrato
		Vib-progr	progressive vibrato
		XF	cell crossfade Matrix

Articulations

37 English Horn I	
01 SHORT + LONG NOTES	Staccato Portato short Portato long with vibrato Portato long without vibrato, hard and soft attack Sustained with and without vibrato
02 DYNAMICS	Medium dynamics with vibrato, 3 sec. Strong dynamics with vibrato, 5 sec. Medium dynamics without vibrato, 1, 1.5, 2, 3, 4, 6 sec. Strong dynamics without vibrato, 4 and 6 sec. pfp with vibrato, 5 sec.; no vibrato, 2 sec. pfp without vibrato, 3, 4, 6, 8, 10 sec. fpf without vibrato, 4 and 6 sec. Fortepiano, sforzato, sforzatissimo
03 FLATTER + TRILLS	Flutter tonguing normal and crescendo Trills, minor and major 2nd Trills accelerando, minor and major 2nd Dynamics for all trills
10 PERF INTERVAL	Legato with and without vibrato Grace notes, legato, minor 2nd to octave Marcato
11 PERF INTERVAL FAST	Legato Marcato
12 PERF TRILL	Trills, legato, minor 2nd to major 3rd
13 PERF REPETITION	Legato, portato, staccato slow and fast Dynamics for all repetitions
14 GRACE NOTES	Grace notes, minor 2nd to octave, up and down
15 SCALE RUNS	Octave runs, up and down major and minor from C to B key, chromatic and whole tone

The orchestra

There are several ways of setting up an orchestra, depending on the era of the piece played, the type of the piece and the instruments it requires, and even on the preference of the conductor. The figure below shows one of the more common setups, which can be taken as a guideline for mixing a composition, properly positioning the instruments in the stereo field and adding reverb according to the size of the concert hall you want your piece to be played in.



- 1 1st and 2nd violin
- 2 Viola
- 3 Cello
- 4 Double bass
- 5 Harp
- 6 Concert flute, piccolo
- 7 Oboe, English horn
- 8 Clarinet, bass clarinet

- 9 Bassoon, contrabassoon
- 10/11 Trumpet
- 12/13 Horn
- 14/15 Trombone
- 16 Tuba
- 17 Timpani
- 18 Drums, cymbals
- 19 other percussion instruments

Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

37 English Horn I

The Instrument

Description

The cor anglais, or English horn, is the alto instrument of the oboe family (oboe: soprano, oboe d'amore: mezzo-soprano, English horn: alto, Heckelphone: baritone).

Since the Classical era orchestras have made use of the English horn's melancholy sound to suggest rural and pastoral scenes and to perform mournful airs.

In the 20th century, several chamber music works were written, but despite this the English horn has not become a solo instrument, remaining chiefly an orchestra instrument.

Range and notation

The English horn has a range from E3–A5. It is a transposing instrument and sounds a fifth lower than written. Notation is in treble clef.

Sound characteristics

Mellow, full, powerful, sonorous, resonant, expressive, vocal, insistent, wistful, plaintive, mournful, melancholy, acerbic, reedy, penetrating, distant, warm, veiled, pastoral.

The English horn sounds darker and more powerful than the oboe. The middle register is the most frequently used register on the English horn and a downward extension of the oboe. The sound can express a wide variety of feelings, from melancholy and despair to carefree merriment and mischievous abandon. The sound seems to come from a long way away which makes it ideal for the creation of sentimental and nostalgic moods.

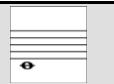
Combination with other instruments

Due to its striking and distinctive character the English horn was used exclusively as a solo instrument to suggest pastoral moods or to evoke feelings of nostalgia by playing elegiac cantilenas till the last third of the 19th century. Today it represents a powerful and distinctive middle voice in the woodwind group. It combines very well with the trumpets and horns; a blend is possible with the violas, which share some of the English horn's dark and acerbic properties.

Patches

01 SHORT + LONG NOTES

Range: D#3–B5



01 EH1_staccato

Samples: 192 RAM: 12 MB

Staccato
3 velocity layers
4 Alternations

02 EH1_portato_short

Samples: 256 RAM: 16 MB

Portato, short
4 velocity layers
4 Alternations

03 EH1_portato_medium

Samples: 256 RAM: 16 MB

Portato, medium
4 velocity layers
4 Alternations

04 EH1_por_lo_hA_noVib

Samples: 128 RAM: 8 MB

Portato, long, without vibrato, hard attack
2 velocity layers
Release samples
2 Alternations

05 EH1_por_lo_sA_noVib

Samples: 128 RAM: 8 MB

Portato, long, without vibrato, soft attack
2 velocity layers
Release samples
2 Alternations

11 EH1_sus_Vib

Samples: 192 RAM: 12 MB

Sustained, with vibrato
3 velocity layers
Release samples

12 EH1_sus_noVib

Samples: 256 RAM: 16 MB

Sustained, without vibrato
4 velocity layers
Release samples

**02 DYNAMICS****Range: D#3–B5****01 EH1_dyn-me_Vib_3s****Samples: 128 RAM: 8 MB**

Medium crescendo and diminuendo with vibrato, 3 sec.

2 velocity layers

AB switch: crescendo/diminuendo

02 EH1_dyn-str_Vib_5s**Samples: 64 RAM: 4 MB**

Strong crescendo and diminuendo with vibrato, 5 sec.

1 velocity layer

AB switch: crescendo/diminuendo

03 EH1_dyn-me_noVib_1s**Samples: 128 RAM: 8 MB**

Medium crescendo and diminuendo without vibrato, 1 sec.

2 velocity layers

AB switch: crescendo/diminuendo

04 EH1_dyn-me_noVib_1'5s**Samples: 128 RAM: 8 MB**

Medium crescendo and diminuendo without vibrato, 1.5 sec.

2 velocity layers

AB switch: crescendo/diminuendo

05 EH1_dyn-me_noVib_2s**Samples: 128 RAM: 8 MB**

Medium crescendo and diminuendo without vibrato, 2 sec.

2 velocity layers

AB switch: crescendo/diminuendo

06 EH1_dyn-me_noVib_3s**Samples: 128 RAM: 8 MB**

Medium crescendo and diminuendo without vibrato, 3 sec.

2 velocity layers

AB switch: crescendo/diminuendo

07 EH1_dyn-me_noVib_4s**Samples: 128 RAM: 8 MB**

Medium crescendo and diminuendo without vibrato, 4 sec.

2 velocity layers

AB switch: crescendo/diminuendo

08 EH1_dyn-me_noVib_6s**Samples: 128 RAM: 8 MB**

Medium crescendo and diminuendo without vibrato, 6 sec.

2 velocity layers

AB switch: crescendo/diminuendo

09 EH1_dyn-str_noVib_4s**Samples: 64 RAM: 4 MB**

Strong crescendo and diminuendo without vibrato, 4 sec.

1 velocity layer

AB switch: crescendo/diminuendo

10 EH1_dyn-str_noVib_6s	Samples: 64	RAM: 4 MB
Strong crescendo and diminuendo without vibrato, 6 sec. 1 velocity layer AB switch: crescendo/diminuendo		
11 EH1_pfp_Vib_5s	Samples: 16	RAM: 1 MB
Crescendo-diminuendo with vibrato, 5 sec. 1 velocity layer		
12 EH1_pfp_noVib_2s	Samples: 32	RAM: 2 MB
Crescendo-diminuendo without vibrato, 2 sec. 2 velocity layers		
13 EH1_pfp_noVib_3s	Samples: 32	RAM: 2 MB
Crescendo-diminuendo without vibrato, 3 sec. 2 velocity layers		
14 EH1_pfp_noVib_4s	Samples: 32	RAM: 2 MB
Crescendo-diminuendo without vibrato, 4 sec. 2 velocity layers		
15 EH1_pfp_noVib_6s	Samples: 32	RAM: 2 MB
Crescendo-diminuendo without vibrato, 6 sec. 2 velocity layers		
16 EH1_pfp_noVib_8s	Samples: 16	RAM: 1 MB
Crescendo-diminuendo without vibrato, 8 sec. 1 velocity layer		
17 EH1_pfp_noVib_10s	Samples: 16	RAM: 1 MB
Crescendo-diminuendo without vibrato, 10 sec. 1 velocity layer		
18 EH1_fpf_noVib_4s	Samples: 32	RAM: 2 MB
Diminuendo-crescendo without vibrato, 4 sec. 2 velocity layers		
19 EH1_fpf_noVib_6s	Samples: 32	RAM: 2 MB
Diminuendo-crescendo without vibrato, 6 sec. 2 velocity layers		
20 EH1_fp	Samples: 32	RAM: 2 MB
Fortepiano 1 velocity layer 2 Alternations		
21 EH1_sfz	Samples: 32	RAM: 2 MB
Sforzato 1 velocity layer 2 Alternations		

22 EH1_sffz	Sforzatissimo 1 velocity layer 2 Alternations	Samples: 32	RAM: 2 MB
<hr/>			
03 FLATTER + TRILLS			
01 EH1_flatter	Flutter tonguing 1 velocity layer Release samples	Range: D#3–B5	Samples: 64 RAM: 4 MB
02 EH1_flatter_cre	Flutter tonguing, crescendo 1 velocity layer	Range: D#3–B5	Samples: 32 RAM: 2 MB
11 EH1_trill_1	Trills, minor 2nd 2 velocity layers Release samples	Range: D#3–A#5	Samples: 124 RAM: 7 MB
12 EH1_trill_2	Trills, major 2nd 2 velocity layers Release samples	Range: D#3–A5	Samples: 120 RAM: 7 MB
13 EH1_trill_1_dyn	Trills, minor 2nd Crescendo and diminuendo 1 velocity layer AB switch: crescendo/diminuendo	Range: D#3–A#5	Samples: 62 RAM: 3 MB
14 EH1_trill_2_dyn	Trills, major 2nd Crescendo and diminuendo 1 velocity layer AB switch: crescendo/diminuendo	Range: D#3–A5	Samples: 60 RAM: 3 MB
15 EH1_trill_1_acc	Trills accelerando, minor 2nd 2 velocity layers Release samples	Range: D#3–A5	Samples: 120 RAM: 7 MB
16 EH1_trill_2_acc	Trills accelerando, major 2nd 2 velocity layers Release samples	Range: D#3–A5	Samples: 120 RAM: 7 MB



17 EH1_trill_1_acc-dyn	Range: D#3–A5	Samples: 60	RAM: 3 MB
Trills accelerando, minor 2nd Crescendo and diminuendo 1 velocity layer AB switch: crescendo/diminuendo			
18 EH1_trill_2_acc-dyn	Range: D#3–A5	Samples: 60	RAM: 3 MB
Trills accelerando, major 2nd Crescendo and diminuendo 1 velocity layer AB switch: crescendo/diminuendo			



10 PERF INTERVAL	Range: D#3–A#5		
01 EH1_perf-legato_noVib		Samples: 726	RAM: 45 MB
Legato without vibrato 2 velocity layers Release samples			
02 EH1_perf-legato_Vib		Samples: 726	RAM: 45 MB
Legato, with vibrato 2 velocity layers Release samples			
03 EH1_perf-legato_grace		Samples: 726	RAM: 45 MB
Grace notes, legato, minor 2nd to octave 2 velocity layers Release samples			
04 EH1_perf-marcato		Samples: 788	RAM: 49 MB
Marcato 2 velocity layers Release samples			
11 PERF INTERVAL FAST	Range: D#3–A#5		
01 EH1_perf-legato_fa		Samples: 782	RAM: 48 MB
Legato, fast 2 velocity layers Release samples			
02 EH1_perf-marcato_fa		Samples: 782	RAM: 48 MB
Marcato, fast 2 velocity layers Release samples			



**12 PERF TRILL****Range: D#3–A#5****01 EH1_perf-trill**

Performance trills, legato, minor 2nd to major 3rd
 2 velocity layers
 Release samples

Samples: 1862 RAM: 116 MB**13 PERF REPETITION****Range: D#3–A#5****01 EH1_perf-rep_leg-sl**

Legato, slow
 3 velocity layers

Samples: 240 RAM: 15 MB**02 EH1_perf-rep_leg-fa**

Legato, fast
 3 velocity layers

Samples: 240 RAM: 15 MB**03 EH1_perf-rep_por-sl**

Portato, slow
 3 velocity layers

Samples: 240 RAM: 15 MB**04 EH1_perf-rep_por-fa**

Portato, fast
 3 velocity layers

Samples: 432 RAM: 27 MB**05 EH1_perf-rep_sta-sl**

Staccato, slow
 3 velocity layers

Samples: 432 RAM: 27 MB**06 EH1_perf-rep_sta-fa**

Staccato, fast
 3 velocity layers

Samples: 432 RAM: 27 MB**21 EH1_perf-rep_dyn5_leg-sl**

Legato dynamics, slow, 5 repetitions
 1 velocity layer
 AB switch: crescendo/diminuendo

Samples: 160 RAM: 10 MB**22 EH1_perf-rep_dyn5_leg-fa**

Legato dynamics, fast, 5 repetitions
 1 velocity layer
 AB switch: crescendo/diminuendo

Samples: 160 RAM: 10 MB**23 EH1_perf-rep_dyn5_por-sl**

Portato dynamics, slow, 5 repetitions
 1 velocity layer
 AB switch: crescendo/diminuendo

Samples: 160 RAM: 10 MB

24 EH1_perf-rep_dyn9_por-fa	Samples: 288	RAM: 18 MB
Portato dynamics, fast, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo		
25 EH1_perf-rep_dyn9_sta-sl	Samples: 288	RAM: 18 MB
Staccato dynamics, slow, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo		
26 EH1_perf-rep_dyn9_sta-fa	Samples: 288	RAM: 18 MB
Staccato dynamics, fast, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo		



14 GRACE NOTES

The samples are mapped to their target note.

01 EH1_grace-1	Range: D#3–A5	Samples: 124	RAM: 7 MB
Grace notes, minor 2nd 2 velocity layers Release samples AB switch: up/down			
02 EH1_grace-2	Range: D#3–A#5	Samples: 124	RAM: 7 MB
Grace notes, major 2nd 2 velocity layers Release samples AB switch: up/down			
03 EH1_grace-3	Range: D#3–A5	Samples: 120	RAM: 7 MB
Grace notes, minor 3rd 2 velocity layers Release samples AB switch: up/down			
04 EH1_grace-4	Range: D#3–A#5	Samples: 120	RAM: 7 MB
Grace notes, major 3rd 2 velocity layers Release samples AB switch: up/down			
05 EH1_grace-5	Range: D#3–A5	Samples: 116	RAM: 7 MB
Grace notes, 4th 2 velocity layers Release samples AB switch: up/down			

06 EH1_grace-6	Range: D#3-A#5	Samples: 116	RAM: 7 MB
Grace notes, diminished 5th 2 velocity layers Release samples AB switch: up/down			
07 EH1_grace-7	Range: D#3-A5	Samples: 112	RAM: 7 MB
Grace notes, 5th 2 velocity layers Release samples AB switch: up/down			
08 EH1_grace-8	Range: D#3-A#5	Samples: 112	RAM: 7 MB
Grace notes, minor 6th 2 velocity layers Release samples AB switch: up/down			
09 EH1_grace-9	Range: D#3-A5	Samples: 108	RAM: 6 MB
Grace notes, major 6th 2 velocity layers Release samples AB switch: up/down			
10 EH1_grace-10	Range: D#3-A#5	Samples: 108	RAM: 6 MB
Grace notes, minor 7th 2 velocity layers Release samples AB switch: up/down			
11 EH1_grace-11	Range: D#3-A5	Samples: 104	RAM: 6 MB
Grace notes, major 7th 2 velocity layers Release samples AB switch: up/down			
12 EH1_grace-12	Range: D#3-A#5	Samples: 104	RAM: 6 MB
Grace notes, octave 2 velocity layers Release samples AB switch: up/down			

15 SCALE RUNS

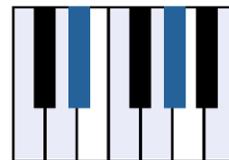
Please note that upward runs can be played only to an octave below the upper play range, downward runs to an octave above the lower play range. The octave runs are mapped diatonically according to their scale.

For the playing ranges and mappings of individual scales, please see the appendix.

C major



C minor



Legato major



01 EH1_run-leg_C-ma (through to B-ma)

Samples: 48

RAM: 3 MB

Octave runs, legato
C to B major
2 velocity layers
AB switch: up/down

Legato minor



01 EH1_run-leg_C-mi (through to B-mi)

Samples: 44

RAM: 2 MB

Octave runs, legato
C to B minor
2 velocity layers
AB switch: up/down

Special



01 EH1_run-leg_chromatic

Range: D#3-A#5

Samples: 40

RAM: 2 MB

Octave runs, legato
Chromatic
2 velocity layers
AB switch: up/down

02 EH1_run-leg_whole

Range: D#3-A#5

Samples: 40

RAM: 2 MB

Octave runs, legato
Whole tone
2 velocity layers
AB switch: up/down

98 RESOURCES

Isolated dynamics repetitions: Legato slow and fast, portato, staccato
 Single layer long notes
 Performance legato with sustain crossfading

01 Perf Rep dyn**Range: D#3–A#5****01 EH1_rep_cre5_leg-sl-1 (2/3/4/5)****Samples: 16 RAM: 1 MB**

Extracted repetition
 Legato slow, cres, 1st to 5th note
 1 velocity layer

01 EH1_rep_dim5_leg-sl-1 (2/3/4/5)**Samples: 16 RAM: 1 MB**

Extracted repetition
 Legato slow, dim, 1st to 5th note
 1 velocity layer

02 EH1_rep_cre5_leg-fa-1 (2/3/4/5)**Samples: 16 RAM: 1 MB**

Extracted repetition
 Legato fast, cres, 1st to 5th note
 1 velocity layer

02 EH1_rep_dim5_leg-fa-1 (2/3/4/5)**Samples: 16 RAM: 1 MB**

Extracted repetition
 Legato fast, dim, 1st to 5th note
 1 velocity layer

03 EH1_rep_cre9_por-1 (2/3/4/5/6/7/8/9)**Samples: 16 RAM: 1 MB**

Extracted repetition
 Portato, cres, 1st to 9th note
 1 velocity layer

03 EH1_rep_dim9_por-1 (2/3/4/5/6/7/8/9)**Samples: 16 RAM: 1 MB**

Extracted repetition
 Portato, dim, 1st to 9th note
 1 velocity layer

04 EH1_rep_cre9_sta-1 (2/3/4/5/6/7/8/9)**Samples: 16 RAM: 1 MB**

Extracted repetition
 Staccato, cres, 1st to 9th note
 1 velocity layer

04 EH1_rep_dim9_sta-1 (2/3/4/5/6/7/8/9)**Samples: 16 RAM: 1 MB**

Extracted repetition
 Staccato, dim, 1st to 9th note
 1 velocity layer

02 Long Notes - Single Layer**Range: D#3–B5****01 EH1_sus_p**

Sustained, piano
1 velocity layer
Release samples

Samples: 64**RAM: 4 MB****02 EH1_sus_mp**

Sustained, mezzopiano
1 velocity layer
Release samples

Samples: 64**RAM: 4 MB****03 EH1_sus_mf**

Sustained, mezzoforte
1 velocity layer
Release samples

Samples: 64**RAM: 4 MB****04 EH1_sus_f**

Sustained, forte
1 velocity layer
Release samples

Samples: 64**RAM: 4 MB****03 Perf Speed variation****Range: D#3–A#5****01 EH1_perf-leg_sustain**

Legato with sustain crossfading
2 velocity layers
Release samples

Samples: 726**RAM: 45 MB****99 RELEASE**

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments matrix – you will not be able to hear anything when you try to play them.

Matrices

Matrix - LEVEL 1

L1 EH1 Articulation Combi

Samples: 1252 RAM: 78 MB

Single note articulations

Staccato, portato short, sustained with and without vibrato, crescendo-diminuendo without (2 sec.) and with vibrato (6 sec.), fortepiano and sforzato, flutter tonguing normal and crescendo, trills half and whole tone

Matrix switches: Horizontal: Keyswitches, C1–F1 Vertical: Modwheel, 2 zones

	H1	H2	H3	H4	H5	H6
V1	stac	sus vib.	pfp vib. 2s.	fp	flutter	trill half
V2	port. short	sus no vib.	pfp no vib. 6s.	sfz	flutter cres.	trill whole

L1 EH1 Perf-Legato Speed

Samples: 902 RAM: 56 MB

Interval performances

Legato with sustain crossfading, normal without vibrato, and fast

Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
Legato	sustain XF	normal	fast

L1 EH1 Perf-Repetitions Combi

Samples: 1104 RAM: 69 MB

Repetition performances

Legato slow

Portato fast

Staccato fast

Matrix switches: Vertical: Modwheel, 3 zones

	repetitions
V1	legato slow
V2	portato fast
V3	staccato fast

Matrix - LEVEL 2 A - Advanced

01 EH1 Perf-Universal

Samples: 1771 RAM: 110 MB

Interval performances

Legato with sustain crossfading, normal without vibrato, and fast

Marcato normal and fast

Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 3 zones

Vertical: Modwheel, 2 zones

	H1	H2	H3
legato	sustain	normal	fast
marcato	normal	normal	fast

02 EH1 Perf-Trill Speed**Samples: 2094 RAM: 130 MB**

Multi interval performances

Legato and trills

Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
V1	legato	trills
V2	%	%

03 EH1 Short+Long notes - All**Samples: 1056 RAM: 66 MB**

Single notes

Staccato, portato short and medium

Sustained with and without vibrato

Matrix switches: Horizontal: Keyswitches, C1–D#1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	staccato	portato short	port. medium	sus. vibrato
V2	%	%	%	sus. no vib.

Matrix - LEVEL 2 B - Standard**11 EH1 Perf-Legato Speed****Samples: 902 RAM: 56 MB**

Interval performances

Legato with sustain crossfading, normal without vibrato, and fast

Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
Legato	sustain XF	normal	fast

12 EH1 Perf-Marcato Speed**Samples: 995 RAM: 62 MB**

Interval performances^m Marcato normal and fast

Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
Marcato	normal	fast

13 EH1 Short notes - All**Samples: 704 RAM: 44 MB**

Single notes

Staccato, portato short and medium, and portato long without vibrato, hard and soft attack

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	staccato	port. short	port. medium	port.long normal attack	port.long soft attack

14 EH1 Long notes - All**Samples: 352 RAM: 22 MB**

Single notes

Sustained with and without vibrato

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
sustained	vibrato	no vibrato

15 EH1 Dynamics - Small**Samples: 480 RAM: 30 MB**

Dynamics

Medium crescendo and diminuendo without vibrato, 2, 3, and 4 sec.

Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C1–D1 Vertical: Modwheel, 4 zones

	C1	C#1	D1
dynamics	2 sec.	3 sec.	4 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

16 EH1 Dynamics - Large**Samples: 784 RAM: 49 MB**

Dynamics

Medium crescendo and diminuendo with and without vibrato

Crescendo-diminuendo with vibrato 5 sec., without vibrato 2, 3, and 4 sec.

Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C1–D1 Vertical: Modwheel, 5 zones

	C1	C#1	D1
V1	dyn.med. vib. 3 sec.	dyn.med. vib. 5 sec.	dyn.med. vib. 5 sec.
V2	dyn.med. no vib. 2 sec.	dyn.med. no vib. 3 sec.	dyn.med. no vib. 4 sec.
V3	pfp vib. 5 sec.	pfp vib. 5 sec.	pfp vib. 5 sec.
V4	pfp no vib. 2 sec.	pfp no vib. 3 sec.	pfp no vib. 4 sec.
V5	fp	sfz	sffz

17 EH1 Flatter**Samples: 96 RAM: 6 MB**

Flutter tonguing

Normal, crescendo, and normal/crescendo with Cell crossfading

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
flutter	normal	crescendo	Cell XF

18 EH1 Trills - normal**Samples: 366 RAM: 22 MB**

Trills

Normal and dynamics

Half and whole tone

Matrix switches: Horizontal: Keyswitches, C1–C#1 Vertical: Modwheel, 2 zones

	C1	C#1
half tone	normal	dynamics
whole tone	normal	dynamics

19 EH1 Trills - accelerando**Samples: 360 RAM: 22 MB**

Trills accelerando

Normal and dynamics

Half and whole tone

Matrix switches: Horizontal: Keyswitches, C1–C#1 Vertical: Modwheel, 2 zones

	C1	C#1
half tone	normal	dynamics
whole tone	normal	dynamics

20 EH1 Trills - All**Samples: 726 RAM: 45 MB**

Trills constant speed and accelerando
 Normal and dynamics
 Half and whole tone

Matrix switches: Horizontal: Keyswitches, C1–D#1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
half tone	normal	dynamics	accelerando	acc. dynamics
whole tone	normal	dynamics	accelerando	acc. dynamics

Matrix - LEVEL 2 C - Repetitions**31 EH1 Perf-Repetitions - Combi****Samples: 1776 RAM: 111 MB**

Repetition performances
 Slow and fast legato, fast portato, slow and fast staccato

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	legato slow	legato fast	portato fast	staccato slow	staccato fast

32 EH1 Perf-Repetitions - Speed**Samples: 1344 RAM: 84 MB**

Repetition performances
 Slow and fast legato, fast portato, fast staccato
 Speed controller

Matrix switches: Horizontal: Speed, 4 zones

	H1	H2	H3	H4
V1	legato slow	legato fast	portato fast	staccato fast

Matrix - LEVEL 2 D - Scale+Phrase**41 EH1 Scale runs-legato - Major****Samples: 276 RAM: 17 MB**

Octave runs, legato, C to B major
 AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
legato maj.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

42 EH1 Scale runs-legato - Minor**Samples: 276 RAM: 17 MB**

Octave runs, legato, C to B minor
 AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
legato min.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

43 EH1 Scale runs-legato - Special**Samples: 80** **RAM: 5 MB**

Octave runs, legato, chromatic and whole tone

AB switch up/down

Matrix switches: Vertical: Modwheel, 2 zones

	legato
V1	chromatic
V2	whole tone

44 EH1 Scale runs-legato - All**Samples: 632** **RAM: 39 MB**

Octave runs, legato, C to B major and minor, chromatic and whole tone

AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1 Vertical: Modwheel, 4 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
major	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
minor	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
chromatic	%	%	%	%	%	%	%	%	%	%	%	%
whole tone	%	%	%	%	%	%	%	%	%	%	%	%

51 EH1 Grace notes - All**Samples: 664** **RAM: 41 MB**

Grace notes, minor 2nd to octave

AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
interval	min. 2nd	maj. 2nd	min. 3rd	maj. 3rd	4th	dim. 5th	5th	min. 6th	maj. 6th	min. 7th	maj. 7th	octave

Matrix - LEVEL 2 E - Keyswitch Vel**71 EH1 Legato slow - cre5****Samples: 80** **RAM: 5 MB**

Slow legato notes: Crescendo, keyswitch velocity

Keyswitches control 5 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

72 EH1 Legato fast - cre5**Samples: 80** **RAM: 5 MB**

Fast legato notes: Crescendo, keyswitch velocity

Keyswitches control 5 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

73 EH1 Portato - cre9**Samples: 144** **RAM: 9 MB**

Portato notes: Crescendo, keyswitch velocity

Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

74 EH1 Staccato - cre9**Samples: 144 RAM: 9 MB**

Staccato notes: Crescendo, keyswitch velocity

Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

75 EH1 Combi - cre5**Samples: 160 RAM: 10 MB**

Slow and fast legato: Crescendo, keyswitch velocity

Keyswitches control 5 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–E1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
legato slow	1st	2nd	3rd	4th	5th
legato fast	1st	%	%	%	%

76 EH1 Combi - cre9**Samples: 288 RAM: 18 MB**

Portato and staccato: Crescendo, keyswitch velocity

Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

77 EH1 Legato slow - dim5**Samples: 80 RAM: 5 MB**

Slow legato notes: Diminuendo, keyswitch velocity

Keyswitches control 5 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

78 EH1 Legato fast - dim5**Samples: 80 RAM: 5 MB**

Fast legato notes: Diminuendo, keyswitch velocity

Keyswitches control 5 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

79 EH1 Portato - dim9**Samples: 144 RAM: 9 MB**

Portato notes: Diminuendo, keyswitch velocity

Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

80 EH1 Staccato - dim9**Samples: 144 RAM: 9 MB**

Staccato notes: Diminuendo, keyswitch velocity

Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

81 EH1 Combi - dim5**Samples: 160 RAM: 10 MB**

Slow and fast legato: Diminuendo, keyswitch velocity

Keyswitches control 5 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–E1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
legato slow	1st	2nd	3rd	4th	5th
legato fast	1st	%	%	%	%

82 EH1 Combi - dim9**Samples: 288 RAM: 18 MB**

Portato and staccato: Diminuendo, keyswitch velocity

Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

Presets

EH1 VSL Preset Level 1**Samples: 3132 RAM: 195 MB**

L1 EH1 Perf-Legato Speed
L1 EH1 Articulation Combi
L1 EH1 Perf-Repetitions Combi
Preset keyswitches: C2–D2

EH1 VSL Preset Level 2**Samples: 6961 RAM: 435 MB**

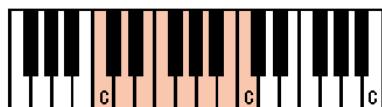
01 EH1 Perf-Universal
02 EH1 Perf-Trill Speed
L1 EH1 Articulation Combi
31 EH1 Perf-Repetitions - Combi
75 EH1 Combi - cre9
44 EH1 Scale runs-legato - all
Preset keyswitches: C2–F2

Appendix

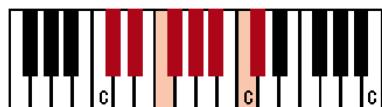
In the following, you will find notations and keyboard layout graphics for major and minor scale runs and arpeggios, as well as a list of playing ranges for the individual scale and arpeggio Patches.

Scale runs - major

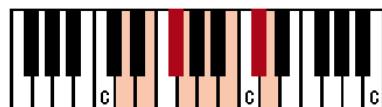
C major



C#/Db major



D major



D#/Eb major



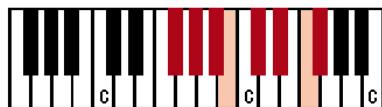
E major



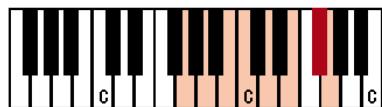
F major



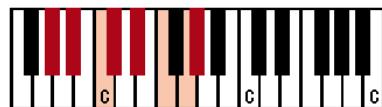
F#/Gb major



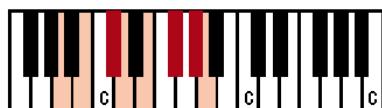
G major



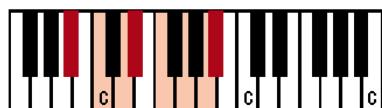
G#/Ab major



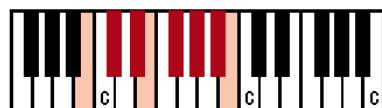
A major



A#/Bb major

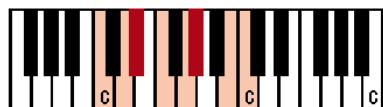


B major



Scale runs - minor

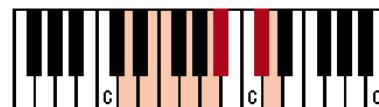
C minor



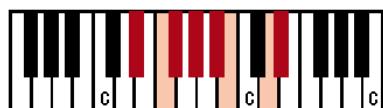
C#/Db minor



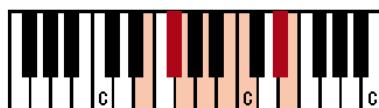
D minor



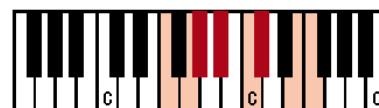
D#/Eb minor



E minor



F minor



F#/Gb minor



G minor



G#/Ab minor



A minor



A#/Bb minor



B minor



Scale ranges

Octave runs

Legato major	play range	Legato minor	play range
01 EH1_run-leg_C-ma	E3–B5	01 EH1_run-leg_C-mi	F3–B5
02 EH1_run-leg_C#-ma	D#3–A#5	02 EH1_run-leg_C#-mi	D#3–A5
03 EH1_run-leg_D-ma	E3–B5	03 EH1_run-leg_D-mi	E3–A#5
04 EH1_run-leg_D#-ma	D#3–A#5	04 EH1_run-leg_D#-mi	D#3–A#5
05 EH1_run-leg_E-ma	E3–B5	05 EH1_run-leg_E-mi	E3–B5
06 EH1_run-leg_F-ma	E3–A5	06 EH1_run-leg_F-mi	E3–A#5
07 EH1_run-leg_F#-ma	F3–A#5	07 EH1_run-leg_F#-mi	F3–B5
08 EH1_run-leg_G-ma	E3–A5	08 EH1_run-leg_G-mi	D#3–A5
09 EH1_run-leg_G#-ma	F3–A#5	09 EH1_run-leg_G#-mi	E3–A#5
10 EH1_run-leg_A-ma	E3–A5	10 EH1_run-leg_A-mi	E3–A5
11 EH1_run-leg_A#-ma	F3–A#5	11 EH1_run-leg_A#-mi	F3–A#5
12 EH1_run-leg_B-ma	D#3–A#5	12 EH1_run-leg_B-mi	E3–A#5